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EMPLOYMENT OF WOMEN IN INDUSTRIES— TWELFTH CENSUS STATISTICS

In the following pages is presented a portion of the results of an attempt to bring together such material as is furnished by the Twelfth Census regarding several topics bearing upon the gainful employment of women in the United States. The present introductory paper deals with the question of numbers only: (1) the relation of the number of women gainfully employed in 1900 to that of those similarly occupied in 1890 with reference to (a) the total population; (b) the male population gainfully employed; (c) the total female population; and (2) the numbers in which women are going into the various occupations, and the extent to which women compete with men.

The justification for such an inquiry is not difficult to find. Interest in the subject of woman's position in the economic world, and particularly in her position as a producer, is so universal that all details of that relationship take on a considerable importance. But curiosity concerning the facts is satisfied only with great difficulty, both because there is a dearth of material, and because of the unorganized form in which such data as exist are to be found, and the heterogeneous character of the sources from which they must be drawn.

Nor is this wholly strange. To be sure, women have always worked. Under the organization of labor as developed by the Greeks and Romans;¹ in the workshops of the monasteries and in the convents of the Middle Ages;² as members of the crafts of Paris, taking an honorable position in an extremely rational system of industry, governed by regulations as to hours, wages, fines, apprentices and promotion, identical with those under which the men worked;³ in the English "factories" of the fourteenth cen-

¹ Leroy-Beaulieu, cited in *Economic Journal*, Vol. IV, p. 52.

² Eckenstein, *Women under Monasticism*, chap. vii.

³ Dixon, "Craftswomen in the *Livre des Métiers*," *Economic Journal*, Vol. V, p. 209.

tury;⁴ in the domestic or cottage system of industry which prevailed largely in England prior to the Industrial Revolution;⁵ in the household activity prevailing in America during the colonial and early republican period⁶—under all these systems women have had their place, so that it may fairly be maintained that “the share taken by women in the work of the world has not altered in amount nor even in intensity, only in character. And even in character it has not changed as much as the working-man imagines.”⁷

But although women have so worked, because of the rapid change from the domestic to the modern factory system, it is not unnatural that industrial conditions after the accomplishment of the Industrial Revolution, i. e., after 1825, should be compared with those prevailing immediately prior thereto, 1700–1770, and as has been well said:

The domestic system of industry was never on its trial, and so long as the head of the household drew the earnings of his wife and daughters, the employment of women was willingly suffered. But exactly how much women worked, or in what branches, or to what extent they worked in other homes than their own, it is difficult to gather except from casual references to them. The domestic system gives little scope for difference in organization, but its advantages and disadvantages, so far as women are concerned, vary enormously, according to the character of the ruler of the household, and according to the local views on the proper treatment of women.⁸

If it could be put on trial, it is very doubtful whether the domestic system could stand a rigorous scrutiny. The whole history of the agitation for child-labor legislation in England is an arraignment of the family as an adequate protection to its dependent members.⁹

And the factory system is on trial because of its abuses, of the compulsion to rapid and often fatal adjustments by other portions of the body social; because those who participate in its various operations acquire a sense of identity of interest, and give utter-

⁴ Taylor, *The Modern Factory System*, p. 53.

⁵ Taylor, *op. cit.*, pp. 57, 58; Toynbee, *Industrial Revolution*, p. 53.

⁶ Twelfth Census, *Manufactures*, Part I, p. lvii.

⁷ Heather-Bigg, “The Wife’s Contribution to the Family Income,” *Economic Journal*, Vol. IV, p. 51.

⁸ Collet, *Changes in the Employment of Women and Girls*, p. 4.

⁹ Taylor, *op. cit.*, chap. ix.

ance to a feeling of common need; because the returns of labor are paid into the hands of individual workers, and are no longer collected for the members of a group by an individual either self-constituted or by social contrivance the head of that group.¹⁰ For all these reasons, the system itself is on trial; and the right of women to a place in that system begins to be questioned by workingmen who, believing in the "lump of labor" theory, prefer not to see the opportunities to work shared by women; by well-meaning persons of other classes who, accepting the "sphere of woman" doctrine, would limit the activities of women of all classes to the bearing and rearing of children, and to making home comfortable under circumstances determined by the amount of the man's wages rather than by the woman's energy or peculiar ability.

And not only is the position of the strictly industrial woman looked at askance. The economic and social effects of the entrance of women into such middle-class occupations as that of clerks, saleswomen, typewriters, or such professional employments as teaching, medicine, and the ministry, are likewise being scrutinized. Women are becoming self-conscious and irritable; men are sometimes obstructive, frequently incredulous, occasionally patronizing, and often unsympathetic. Yet the problem has not been definitely formulated; observations have not been systematically made; conclusions and convictions rest on *a priori* reasoning, biological analogy, or limited personal experience.

In this state of confusion, the attempt is here made to bring together certain facts and figures collected from the Twelfth Census which bear upon the question.¹¹

A few explanatory remarks as to material should be made. Resort has been had to the three portions of the census treating of *Population, Occupations, Employees and Wages*, and *Manu-*

¹⁰ Even when a trade-union succeeds in obtaining the collective bargain, the contract is not only for the benefit of the individual members, but is in theory with them. (*Burnetto vs. Marceline Coal Co.*, 180 Mo. 241, 79 S. W. 136.)

¹¹ We are glad to acknowledge the merit and suggestiveness of a larger but somewhat similar study, to which reference has been already made, in which the figures of the British Census of 1890 are utilized, the *Report on the Statistics of Employment of Women and Girls*, by Miss Collet.

factures. The first two volumes were prepared under the direction of William G. Hunt, chief census statistician for population. The volumes devoted to manufacture were prepared under direction of S. N. D. North, chief statistician for manufactures. That on employees and wages is the result of a special investigation by Professor Davis R. Dewey as special expert agent. The volume most used in the following inquiry is that dealing with occupations, and the method of taking this particular census may be described as follows. The "Population" schedule, which contained inquiries regarding residence, general nativity, sex, color, parentage, place of birth, marital status, and citizenship of all inhabitants of the United States, called also for a "statement of the occupation, trade, or profession of each person ten years of age and over who was . . . occupied in gainful labor." This inquiry was confined to a simple statement of the kind of work done or character of service rendered.

No attempt was made, by means of specific returns on the schedule, to distinguish employers from employees . . . nor whether the work was done at home or in a shop or factory, or, in the case of an employer, to record the name or location of the establishment.

It is to be regretted that these portions of the census are treated as independent investigations or conducted by different authorities according to different plans. Sources of confusion reveal themselves at once. For example, the returns concerning occupations apply to persons ten years of age and over, and all the figures in the Census of Occupations apply to this class of workers,¹² whereas in the Census on Manufactures we have figures relating to wage-earners, who are classified as "men sixteen years and over," "women sixteen years and over," and "children under sixteen years."¹³ And lack of clearness shows itself in the distinctions attempted in the volume on *Occupations*. For example, the meaning of "gainful occupation" is not stated, but must be derived from the illustrations given. Enumerators are instructed as follows:

¹² *Instructions to Enumerators*, p. 31, § 154.

¹³ Twelfth Census, *Manufactures*, Part I, p. xlvii.

Sec. 160. If a married woman has a gainful occupation, return the occupation accordingly, whether she does the work at her home, or goes regularly to a place of employment, and whether she is regularly or only occasionally employed. For example, "milliner," "dressmaker," "nurse," etc.

Sec. 185. Return as *housekeeper* a woman who receives a stated wage or salary for her services, and do not confuse her with a woman who keeps house for her own family or for herself, without any gainful occupation, or with a grown daughter who assists in the household duties without pay. A wife or daughter who simply keeps house for her own family should not be returned as a housekeeper in any case.

This lack of distinctness becomes confusion and obscurity when the enumerators are told to distinguish (sec. 217) cloak-makers, dressmakers, seamstresses, and tailoresses, without further directions which would enable one afterward to locate the "home finisher."

I. RELATION OF NUMBER OF WOMEN GAINFULLY EMPLOYED IN 1900 TO THOSE SIMILARLY EMPLOYED IN 1890

The fundamental question concerning the employment of women is: How many women in the United States are gainfully employed? But this question loses much of its significance unless certain other closely related questions are raised in connection with it. These are: (a) How do statistics of employment of women in 1900 compare with those for 1890? (b) How does the rate of increase in number of women gainfully employed compare with the rate of increase for men so employed? (c) How does it compare with that for total population and for total female population? The following table furnishes the necessary data for answering these questions. It gives the number of each sex gainfully employed in 1890 and 1900, the total population, male and female, over ten years of age, together with the percentage increases for the decade.

	TOTAL		WOMEN		MEN		PER CENT. INCREASE FOR DECADE		
	1900	1890	1900	1890	1900	1890	Total	Men	Women
Population over ten years	57,949,824	47,413,559	28,246,384	23,060,900	29,703,440	24,352,639	22.2	22.4	21.9
Gainfully employed	29,073,233	23,318,183	5,319,397	4,005,532	23,753,836	19,312,651	24.6	22.9	32.8

From these statistics it is clear: (1) that there were more than five million women gainfully employed in 1900; (2) that the rate of increase for the decade in the number of women gainfully employed (32.8 per cent.) was much greater than the corresponding rate of increase for the employment of men (22.9 per cent.), though the latter was maintained at a rate equal to the rate of increase for the population; (3) that the number of women gainfully employed has increased more rapidly than female population, or total population over ten years of age.

Looking at these statistics in a further and somewhat larger connection, we find that in 1900, 50.2 per cent., and in 1890, 49.2 per cent., of the total population over ten years of age were engaged in gainful occupations. There has, then, been a very small increase in the percentage which the gainfully employed form of population, and two questions follow. (1) Has this been a general and even increase throughout the country, or has the number of the gainfully employed changed more rapidly in some sections than in others? (2) Has this been an increase for both men and women?

With regard to the first question, when the detailed tables¹⁵ in the census are examined, it appears that this increase occurred in all sections of the country, except in the group of states forming the so-called "Western Division." In this division the proportion which the gainfully employed formed of the total population was somewhat smaller in 1900 than in 1890—a decrease which is explained in the census as being "probably due to the changing conditions of their settlement affecting the age and sex constitution of the population."¹⁶

The other question, which is more important in connection with the present study, can also be answered by referring to the other census tables. We find there that in 1890 the number of women engaged in gainful occupations constituted 17.4 per cent. of the total population; in 1900 it was 18.8 per cent.; and this increase was to be found throughout the country, except in Louisiana, where probably there has been a decrease in the num-

¹⁵ Twelfth Census, *Occupations*, Table XIV, p. lxxvi.

¹⁶ *Ibid.*, p. lxxix.

ber of women employed in the fields, and in Wyoming and Colorado where the decrease is quite insignificant.

The number of men engaged in gainful occupations was in 1890, 79.3 per cent. of the total male population over ten years of age, while in 1900 it was 80 per cent., a smaller increase for men than for women. The proportion which the gainfully occupied women bear to the total female population varies, of course, very greatly in different sections of the country, being extremely small in the western states, and relatively high in the manufacturing states of the East, and in some of the agricultural states of the South. For example, in Oklahoma 7.9 per cent. of the female population were gainfully employed; in Idaho, 9.4 per cent.; in South Carolina, 38.0 per cent.; in Mississippi, 32.7 per cent.; in Rhode Island, 29.6 per cent.; and in Massachusetts, 28.1 per cent. The reasons for these differences are so obvious that no explanation is attempted. One point, however, seems clear, namely, that women are tending to form an increasing proportion of the gainfully employed throughout the country; and the next step will be to inquire what the occupations are into which they have gone or are going in increasing numbers.

II. IN WHAT OCCUPATIONS ARE WOMEN ENGAGED AND HOW FAR DO THEY COMPETE WITH MEN?

Occupations.—The list of occupations scheduled by the Twelfth Census contains 303 separate employments, in 295 of which women are found. These are as follows:¹⁷

AGRICULTURAL PURSUITS

Agricultural laborers	Florists, nurserymen, and vine-growers
Farm and plantation laborers	Fruit-growers
Farm laborers (members of family)	Lumbermen and raftsmen
Garden and nursery laborers	Stock-raisers, herders, and drovers
Dairymen and dairywomen	Stock-raisers
Farmers, planters, and overseers	Stock-herders and drovers
Farmer and planters	Turpentine farmers and laborers
Farmers (members of family)	Wood-choppers
Farm and plantation overseers	Other agricultural pursuits
Milk farmers	Apiarists
Gardeners, florists, nurserymen, etc.	Not specified
Gardeners	

¹⁷ Twelfth Census, *Occupations*, Table I, p. 8.

PROFESSIONAL SERVICE

Actors, professional showmen, etc.	Librarians and assistants
Actors	Chemists, assayers, and metallurgists
Professional showmen	Musicians and teachers of music
Theatrical managers, etc.	Officials (government)
Architects, designers, draftsmen, etc.	Officials (national government)
Architects	Officials (state government)
Designers, draftsmen, and inventors	Officials (county government)
Artists and teachers of art	Officials (city or town government)
Clergymen	Physicians and surgeons
Dentists	Teachers and professors in colleges, etc.
Electricians	Teachers
Engineers (civil, etc.) and surveyors	Professors in colleges and universities
Engineers (civil)	Other professional service
Engineers (mining)	Veterinary surgeons
Surveyors	Not specified
Journalists	
Lawyers	
Literary and scientific persons	
Authors and scientists	

DOMESTIC AND PERSONAL SERVICE

Barbers and hairdressers	Nurses and midwives
Bartenders	Nurses (trained)
Boarding- and lodging-housekeepers	Nurses (not specified)
Hotel-keepers	Midwives
Housekeepers and stewards	Restaurant-keepers
Janitors and sextons	Saloonkeepers
Janitors	Servants and waiters
Sextons	Servants
Laborers (not specified)	Waiters
Elevator tenders.	Watchmen, policemen, firemen, etc.
Laborers (coal yard)	Watchmen, policemen, and detectives
Laborers (general)	Other domestic and personal service
Longshoremen	Bootblacks
Stevedores	Hunters, trappers, guides, and scouts
Launderers and laundresses	Not specified
Laundry work (hand)	
Laundry work (steam)	

TRADE AND TRANSPORTATION

Agents	Clerks and copyists
Agents (insurance and real estate)	Clerks and copyists
Agents (not specified)	Clerks (shipping)
Bankers and brokers	Letter- and mail-carriers
Bankers and brokers (money and stocks)	Commercial travelers
Brokers (commercial)	Draymen, hackmen, teamsters, etc.
Boatmen and sailors	Draymen, teamsters, and expressmen
Boatmen and canalmen	Carriage- and hack-drivers
Pilots	Foremen and overseers
Sailors	Foremen and overseers (livery stable)
Bookkeepers and accountants	

Foremen and overseers (steam rail-road)	Official of banks and companies
Foremen and overseers (street rail-way)	Bank officials and cashiers
Foremen and overseers (not speci-fied)	Officials (insurance and trust com-panies, etc.)
Hostlers	Officials (trade companies)
Hucksters and peddlers	Officials (transportation companies)
Livery-stable keepers	Packers and shippers
Merchants and dealers (except whole-sale)	Porters and helpers (in stores, etc.)
Boots and shoes	Salesmen and saleswomen
Cigars and tobacco	Steam railroad employees
Clothing and men's furnishings	Baggagemen
Coal and wood	Brakemen
Drugs and medicines	Conductors
Dry goods, fancy goods, and no-tions	Engineers and firemen
General store	Laborers
Groceries	Station agents and employees
Liquors and wines	Switchmen, yardmen, and flagmen
Lumber	Stenographers and typewriters
Produce and provisions	Stenographers
Not specified	Typewriters
Merchants and dealers (wholesale)	Street-railway employees
Messengers and errand and office boys	Conductors
Bundle and cash boys	Laborers
Messengers	Motormen
Office boys	Station agents and employees
	Telegraph and telephone linemen
	Telegraph and telephone operators
	Telegraph operators
	Telephone operators
	Undertakers

OTHER PERSONS IN TRADE AND TRANSPORTATION

Auctioneers	Newspaper carriers and newsboys
Decorators, drapers, and window dressers	Weighers, gaugers, and measurers
	Not specified

MANUFACTURING AND MECHANICAL PURSUITS

<i>Building Trades</i>	Plumbers and gas- and steam-fitters
Carpenters and joiners	Plumbers and gas- and steam-fitters
Carpenters and joiners	Apprentices and helpers
Ship carpenters	Plasterers
Apprentices and helpers	Plasterers
Masons (brick and stone)	Apprentices and helpers
Masons	Roofers and slaters
Masons' laborers	Roofers and slaters
Apprentices and helpers	Mechanics (not otherwise specified)
Painters, glaziers, and varnishers	<i>Chemicals and Allied Products</i>
Painters, glaziers, and varnishers	Oil-well and oil-works employees
Painters (carriages and wagons)	Oil-well employees
Apprentices and helpers	Oil-works employees
Paper-hangers	Other chemical workers
Paper-hangers	Chemical-works employees
Apprentices and helpers	Fertilizer-makers

Powder- and cartridge-makers
Salt-works employees
Starch-makers

Clay, Glass, and Stone Products

Brick- and tilemakers
Brickmakers
Tilemakers
Terra-cotta workers
Glassworkers
Marble- and stone-cutters
Potters

Fishing and Mining

Fishermen and oystermen
Miners and quarrymen
Miners (coal)
Miners (gold and silver)
Miners (not otherwise specified)
Quarrymen

Food and Kindred Products

Bakers
Butchers
Butter- and cheese-makers
Confectioners
Millers
Other food preparers
Fish-curers and packers
Meat- and fruit-canners and pre-
servers
Meat-packers, curers, and picklers
Sugar-makers and refiners
Not specified

Iron and Steel and Their Products

Blacksmiths
Blacksmiths
Apprentices and helpers
Iron and steel workers
Iron- and steel-workers
Molders
Machinists
Machinists
Apprentices and helpers
Steam-boiler makers
Steam-boiler makers
Stove-, furnace-, and grate-makers
Tool- and cutlery-makers
Wheelwrights
Wireworkers

Leather and its Finished Products

Boot- and shoemakers and repairers
Boot- and shoe-factory operatives

Shoemakers (not in shoe factory)
Apprentices
Harness- and saddle-makers and re-
pairers
Leather-curriers and tanners
Curriers
Tanners
Apprentices
Trunk and leather-case makers, etc.
Trunkmakers
Leather-case and pocketbook-
makers

Liquors and Beverages

Bottlers and soda-water makers, etc.
Bottlers
Mineral- and soda-water makers
Brewer and maltsters
Distillers and rectifiers

Lumber and its Manufactures

Cabinetmakers
Coopers
Saw- and planing-mill employees
Saw- and planing-mill employees
Lumber-yard employees
Other woodworkers
Basketmakers
Boxmakers (wood)
Furniture manufacture employees
Piano- and organ-makers
Not specified

*Metals and Metal Products other
than Iron and Steel*

Brassworkers
Brassworkers
Molders
Clock- and watchmakers and re-
pairers
Clock-factory operatives
Watch-factory operatives
Clock- and watch-repairers
Gold- and silver-workers
Gold- and silver-workers
Jewelry manufactory employees
Tin-plate and tinware makers
Tin-plate makers
Tinnors and tinware makers
Apprentices (tinsmiths)
Other metal-workers
Copper-workers
Electroplaters

Gunsmiths, locksmiths, and bell-hangers
Lead- and zinc-workers
Molders (metals)
Not specified

Paper and Printing

Bookbinders
Boxmakers (paper)
Engravers
Paper- and pulp-mill operatives
Printers, lithographers, and pressmen
Printers and pressmen
Lithographers
Compositors
Electrotypers and stereotypers
Apprentices (printers)

Textiles

Bleachery and dye-works operatives
Bleachery operatives
Dye-works operatives
Carpet-factory operatives
Cotton-mill operatives
Hosiery- and knitting-mill operatives
Silk-mill operatives
Woolen-mill operatives
Other textile-mill operatives
Hemp- and jute-mill operatives
Linen-mill operatives
Print-works operatives
Rope- and cordage-factory operatives
Worsted-mill operatives
Textile not specified
Dressmakers
Dressmakers
Apprentices
Hat- and cap-makers
Milliners
Milliners
Apprentices
Seamstresses
Shirt-, collar-, and cuff-makers

Tailors and tailoresses
Tailors and tailoresses
Apprentices
Other textile workers
Carpetmakers (rag)
Lace and embroidery makers
Sail-, awning-, and tent-makers
Sewing-machine operators
Not specified

Miscellaneous Industries

Broom- and Brush-makers
Charcoal-, coke-, and lime-burners
Engineers and firemen (not locomotive)
Glovemakers
Manufacturers and officials, etc.
Manufacturers and officials, etc.
Builders and contractors
Publishers of books, maps, and newspapers
Officials of mining and quarrying companies
Model- and pattern-makers
Photographers
Rubber-factory operatives
Tobacco- and cigar-factory operatives
Upholsterers
Other miscellaneous industries
Apprentices and helpers (not specified)
Artificial-flower makers
Button-makers
Candle-, soap-, and tallow-makers
Corset-makers
Cotton-ginners
Electric-light and power-company employees
Gas-work employees
Piano- and organ-tuners
Straw-workers
Turpentine-distillers
Umbrella- and parasol-makers
Well-borers
Whitewashers
Not specified

EMPLOYMENTS IN WHICH THERE ARE NO WOMEN ARE:

Soldiers (U. S.), Sailors (U. S.), Marines (U. S.), Street-car drivers, Firemen (fire department), Apprentices and helpers to roofers and slaters, Helpers to steam-boiler makers, Helpers to brass-workers.

It should be noted that the "helper" is an unskilled person who supplies physical strength. Absence of women from the list

of apprentices is a striking illustration of the common attitude of men toward admission of women into industrial life.¹⁸

Into what occupations are women going in increasing numbers? And are there any occupations which may be called declining?—The 295 occupations enumerated may be further collected into the general occupational groups: agriculture, professional service, domestic and personal service, trade and transportation, manufacturing and mechanical pursuits. In answering these questions, it is necessary to examine the statistics for these groups, and then those given in the more detailed classification, which might properly be called a classification into industrial groups. It is necessary also to study in parallel columns similar statistics of the employment of men in order to see whether the change in employment of women has been due to some special cause affecting women only or to some general industrial change which would affect men and women both.

The table given below shows the number of women and the number of men employed in 1890 and 1900 in the five large groups of the census classification, above mentioned, together with the percentage increase for the decade. Statistics are given which make possible also a comparison between the rates of increase for each group, for population and for total number of each sex gainfully employed.

CLASSES OF OCCUPATIONS	WOMEN		MEN		PER CENT. INCREASE IN 1900 OVER 1890	
	1900	1890	1900	1890	Women	Men
Agriculture.....	977,336	769,845	9,404,429	8,378,603	26.9	12.2
Professional service.....	430,597	311,687	827,941	632,646	38.1	30.8
Domestic and personal service....	2,095,449	1,667,651	3,485,208	2,553,161	25.6	36.5
Trade and transportation.....	503,347	228,421	4,263,617	3,097,701	120.3	37.6
Manufacturing and mechanical Products.....	1,312,668	1,027,928	5,772,641	4,650,540	27.7	24.1
All occupations.....	5,319,397	4,005,532	23,753,836	19,312,651	32.8	22.0
Population over 10 years.....	28,246,384	23,060,900	29,703,440	24,352,659	22.4	21.9

¹⁸ Above, p. 16. Reference may likewise be made to an interesting study on *Sex in Industry*, issued by the Massachusetts Bureau of Labor, 1903, p. 210 in which it appears that in Massachusetts there were 5,320 boys serving apprenticeships, as contrasted with 87 girls, exclusive of those serving a so-called but meaningless apprenticeship in dressmakers' and milliners' shops.

This table warrants the conclusions: (1) that the rate of increase in the number of women employed in each of the five large occupational groups is greater than the rate of increase for the female population; (2) that the rate of increase in two of these groups—professional service, and trade and transportation—is greater, and in the three others—agriculture, domestic and personal service, and manufacturing and mechanical pursuits—less, than the rate of increase in the total number of women gainfully employed. One might be tempted to conclude hastily from these percentages that “trade and transportation” and “professional service” are gaining at the expense of the other groups; but such a conclusion is seen to be unwarranted after a careful examination of the figures from which the rates of increase were computed. The percentages of gain are misleading when the small number of professional women, for example, is compared with the large number of women in the group designated “manufacturing and mechanical pursuits.” In the table which follows an attempt is made to arrive at a more correct result by comparing, not absolute numbers and percentages, but the number of women in each ten thousand of the total number of women over ten years of age who were employed in these different occupational groups in 1900 and 1890, and the resulting increases or decreases. The table which follows shows the number of men and women in each of the large occupational groups out of every ten thousand of each sex in the population above ten years of age.

OCCUPATIONAL GROUPS	NUMBER OF WOMEN EMPLOYED PER 10,000 WOMEN OF AND ABOVE 10 YEARS OF AGE			NUMBER OF MEN EMPLOYED PER 10,000 MEN OF AND ABOVE 10 YEARS OF AGE			
	1900	1890	Increase	1900	1890	Increase	Decrease
Agriculture.....	346.0	333.8	12.2	3166.1	3440.5	.....	274.4
Professional service.....	152.4	135.1	17.3	278.7	250.7	19.0	.....
Domestic and personal service.....	741.8	723.1	18.7	1173.3	1048.4	124.9	.....
Trade and transportation.....	178.1	99.0	79.1	1435.3	1272.0	163.3	.....
Manufacturing and mechanical pursuits.	464.7	445.7	19.0	1943.4	1909.6	33.8	.....
All occupations.....	1883.2	1736.9	146.3	7997.0	7930.3	66.7	

From this table it is possible to compare satisfactorily the changes (1) in the number of women employed in the different

groups, and (2) in the large numbers of men and relatively small numbers of women employed in all groups.

The first table gave a disproportionate importance both to professional service and to trade and transportation, while this table shows that, though the number of women in the latter group is increasing much faster than in the others, there are more women still who are going into manufacturing and mechanical pursuits, and domestic and personal service, than into professional service. This table further presents in their proper relation the changes in the number of men and women in the different groups. While the first table showed a much larger increase for women than for men in all of the groups except domestic and personal service, this table shows that the increases are larger for men than for women in every group except agriculture. The difference between the two tables is due, of course, to the fact that a comparatively small increase in small numbers will show a larger percentage of increase than a much larger increase in a large number. From these two tables we may finally conclude (1) that the rate of increase in each of these groups is greater than the rate of increase in the female population; (2) that more men than women are still going into each of these groups except agriculture; (3) that almost as many women as men are entering professional service of some sort—mainly, of course, teaching; (4) that the “trade and transportation” group is increasing more rapidly than the others for both men and women; (5) that for women three of the other groups—“professional service,” “manufacturing and mechanical pursuits,” and “domestic and personal service”—show fairly equal gains, and the group “agriculture” is not far behind. For women, then, “trade and transportation” alone shows a disproportionate increase. It is into this class that the new recruits to the ranks of gainfully employed women have gone. Since this group represents middle-class rather than working-class women, it seems fair to conclude that the increase in the gainful employment of women has been caused by an increase in the number of middle-class¹⁹ women who

¹⁹ It is of interest to note that this same conclusion with regard to the increase in the number of gainfully employed women in England was reached by

are becoming self-supporting. The women of the working-class have long been obliged to seek gainful employment of some sort, and the number of these women who are "working" outside the home is likely to be a fairly constant quantity.

In considering the question of the "declining" occupations for women, it is necessary to study the statistics given in the more detailed classification which the census calls a classification into occupations, but which would more properly be called a classification into industrial groups. For an occupation should tell what the person employed really does; it should say, for example, that the employee is a card-grinder, a weaver, or a spinner, instead of saying merely that he is employed in a cotton-mill. Because the census gives only this latter classification, it would be more proper to call it a classification into industrial groups rather than occupations. In studying these statistics for industrial groups, we find that in 1900 there were eighteen so-called "occupations" each of which employed 1 per cent. or more than 1 per cent. of the total number of women gainfully employed. These eighteen together employed 86.8 per cent. of

OCCUPATION*	WOMEN		MEN		PER CENT. INCREASE	
	1900	1890	1900	1890	Women	Men
Agricultural laborers.....	663,209	538,065	3,747,668	3,048,518	23.2	22.9
Farmers, planters, and overseers...	307,706	226,427	5,367,169	5,055,130	35.8	6.1
Musicians and teachers of music	52,359	34,519	39,815	27,636	51.7	44.0
Teachers and professors in colleges	327,614	246,066	118,519	101,278	33.1	17.0
Boarding and lodging-house keepers.....	59,455	32,593	11,826	11,756	82.4	.5
Housekeepers and stewardesses...	146,929	86,089	8,224	5,947	70.6	38.2
Laundresses.....	335,282	216,631	50,683	31,831	54.7	59.2
Nurses and midwives.....	108,691	41,396	12,265	6,190	162.5	98.1
Servants and waitresses.....	1,283,763	1,216,639	276,958	238,152	65.5	16.2
Bookkeepers and accountants....	74,153	27,772	180,727	131,602	167.0	37.3
Clerks and copyists.....	85,246	64,219	544,881	493,139	32.7	10.4
Saleswomen.....	149,230	58,451	461,909	205,943	155.3	124.2
Stenographers and typewriters....	86,118	21,270	26,246	12,148	304.8	116.0
Cotton-mill operatives.....	120,603	92,965	125,788	80,177	29.7	56.8
Dressmakers.....	344,794	292,668	2,090	836	17.8	150.0
Milliners.....	86,120	61,291	1,739	395	40.5	340.2
Seamstresses.....	146,105	146,043	4,837	4,001	.04	20.8
Tailoresses.....	68,935	64,509	160,714	123,516	6.8	30.1
Total number gainfully em- ployed.....	5,319,397	4,005,532	23,753,836	19,312,651	32.8	22.9
Population over 10 years.....	28,246,384	23,060,900	29,703,440	24,352,659	22.4	21.9

* Two groups—"laborers not specified" and "other textile operatives"—which employ more than 1 per cent. of the women were excluded as being too general to be significant.

Miss Collet in her *Report on the Statistics of the Employment of Women and Girls* (London, 1894), p. 71.

the total number of gainfully employed women. In the next table the number of men and women employed in each of these "occupations" is given, and percentage increase has been computed in order that it might be compared with the rate for population and for total number of each sex gainfully employed.

No one of these occupations showed for women an absolute decrease during the decade 1890-1900, but four showed what may be called, in comparison with the rate of increase for the population, a relative decrease. That is, the rate of increase in four occupations was less than the rate of increase for population. It was also, of course, less than the rate of increase in the number of women gainfully employed. These four "declining occupations" among the eighteen most important occupations for women are, curiously enough, those regarded as traditionally feminine—dressmakers, seamstresses, tailoresses, servants, and waitresses. Of the other fourteen occupations in this group, one, "stenographers and typewriters," had more than tripled its numbers; three others—"saleswomen," "bookkeepers and accountants," and "nurses and midwives"—had more than doubled; five—"musicians and teachers of music," "boarding- and lodging-house keepers," "housekeepers and stewardesses," and "laundresses"—had increased by more than one-half. What seems most significant is that no one of the occupations showing a marked increase lies within either the manufacturing or agricultural group. Since it is the other groups which are most likely to attract middle-class women, there would seem to be again an indication that increase in the gainfully employed is due to employment of women of the middle class rather than to any change in proportion among women of the working-classes.

In studying the statistics given for occupations employing less than 1 per cent. of the gainfully occupied women in 1900, three are found to be absolutely declining. The number of women saloonkeepers has decreased 8.3 per cent. since 1890; the number of carpet-factory operatives, 16.3 per cent., and of woolen-mill operatives, 16 per cent. For men the number of saloonkeepers has increased, but the other two occupations show absolute decreases for men also, as the following table indicates.

OCCUPATIONS	ABSOLUTE INCREASE OR DECREASE		PERCENTAGE INCREASE OR DECREASE	
	Women	Men	Women	Men
Saloonkeepers	- 189	+12,550	- 8.3	+18.1
Carpet-factory operatives	-1,755	- 1,175	-16.3	-10.1
Woolen-mill operatives	-5,841	- 5,072	-16.0	-10.6

To those who are hopeful that the field of employment for women may be widened, it is of great importance to know in what occupations women are employed in either absolutely or relatively declining numbers, and whether this decline is to be attributed to any "net disadvantages" connected with women's work, or to any special conditions in these industries making them unsuitable for women, rather than to general conditions in the industry affecting both men and women. In the table above the absolute decrease in the number of men employed in carpet factories and woolen mills is almost equal to the absolute decrease in the number of women employed; so that it would be hardly fair to infer that there were any special conditions here affecting women's work. Decline in number of women saloon-keepers is easily attributed to coercive force of public opinion.

The subject of "declining" occupations for women cannot

OCCUPATIONS	NUMBER OF WOMEN EMPLOYED		NUMBER OF MEN EMPLOYED		PER CENT. INCREASE OF DECREASE	
	1900	1890	1900	1890	Women	Men
Gardeners, florists and nursery-men	2,860	2,415	58,928	70,186	+18.4	- 16.0
Artists and teachers of art	11,021	10,815	13,852	11,681	+ 1.9	+ 18.5
Boot and shoemakers	39,510	33,704	169,393	180,871	+17.2	- 6.3
Clock and watch repairers	4,815	4,696	19,305	20,556	+ 2.5	- 6.0
Paper and pulp-mill operatives	9,424	8,961	26,904	18,856	+ 5.1	+42.6
Rubber factory operatives	7,374	6,456	14,492	9,706	+14.2	+49.3
Hat and cap makers	7,623	6,604	15,110	17,319	+13.8	- 12.7
Upholsterers	2,158	1,748	28,663	23,918	+23.4	+ 19.8
Servants and waitresses*	1,283,763	1,216,639	276,958	238,152	+ 5.5	+16.2
Dressmakers*	344,794	292,668	2,090	836	+17.8	+150.0
Tailors and tailoresses*	68,935	64,509	160,714	123,516	+ 6.8	+30.1
Seamstresses*	146,105	146,043	4,837	4,001	+ 0.04	+20.8
Saloonkeepers*	2,086	2,275	81,660	69,110	- 8.3	+18.1
Carpet-factory operatives*	9,001	10,756	10,371	28,810	-16.3	-10.1
Woolen-mill operatives*	30,630	42,566	36,471	47,638	-16.0	-10.6
Total number gainfully employed	5,319,397	4,005,532	23,753,836	19,312,652	32.8	22.9
Population over ten years	28,246,384	23,060,900	29,703,440	24,352,659	22.4	21.9

* Repeated from preceding tables.

be left here. Further study of the statistics for the occupations employing less than 1 per cent. of all the gainfully employed women shows that, though there may be only three which show an "absolute" decrease, there are several which are "declining"; that is, there are several in which the number of women employed has increased at a rate lower than that at which the female population has moved. The next table contains the statistics for all of the "declining" occupations for women.

From this table it appears that, in addition to the seven occupations already noted as "declining," there are eight other "declining" occupations among those which employ less than 1 per cent. of the total number of women gainfully employed. Among these fifteen, only three—dressmakers, paper- and pulp-mill and rubber-factory operatives—are not also declining occupations for men; so that the relatively small increase in the number of women employed cannot be due to any special characteristic of women's work. It would be interesting to know why paper- and pulp-mills and rubber factories are becoming men's industries; but on this point census statistics throw no light.

That women dressmakers have increased 17.8 per cent. and men dressmakers 150 per cent., or that women seamstresses have increased 0.04 per cent. and "men seamstresses" (the census classification) 20.8 per cent., means very little, because, as was explained with reference to the larger occupational groups, a comparatively small increase for small numbers will show a much larger percentage gain than a much larger increase for large numbers. This also explains the increase of 40.5 per cent. for women milliners, and 340.2 per cent. for men milliners. In order to make a correct comparison between the relative increases in the number of women and men in the most important occupations for women, another table has been computed for the occupations which employed at least 1 per cent. of the total number of women gainfully employed in 1900. This table shows not the absolute numbers employed and the gains per cent., but, instead, the number of men and women per ten thousand of each sex in the population over ten years of age, and the change for each such occupation.

OCCUPATIONS	NUMBER OF WOMEN EMPLOYED Per 10,000 Women above 10 Years			NUMBER OF MEN EMPLOYED Per 10,000 Men above 10 Years		
	1900	1890	Change	1900	1890	Change
Agricultural laborers	234.7	233.3	+ 1.4	1,261.6	1,251.8	+ 9.8
Farmers, planters, and overseers	108.9	98.1	+10.8	1,806.9	2,075.7	-168.8
Musicians and teachers of music.....	18.5	14.9	+ 3.6	13.4	11.3	+ 2.1
Teachers and professors	115.9	106.7	+ 9.2	39.9	41.5	- 1.6
Boardinghouse keepers	21.0	14.1	+ 6.9	3.9	4.8	- 0.9
Housekeepers and stewardesses	52.0	37.3	+14.7	2.7	2.4	+ 0.3
Laundresses	118.6	93.9	+14.7	17.0	13.0	+ 4.0
Nurses and midwives	38.4	17.9	+20.5	4.1	2.5	+ 1.6
Servants and waitresses	454.3	527.5	- 7.2	93.2	97.7	- 5.2
Bookkeepers, etc.....	26.2	12.4	+13.8	60.8	54.0	+ 6.8
Clerks and copyists	30.1	27.8	+ 2.3	183.4	202.4	- 19.0
Saleswomen	52.8	25.3	+27.5	155.5	84.5	+ 69.0
Stenographers and typewriters	30.4	9.2	+21.2	8.8	4.9	+ 3.8
Cotton-mills operatives	42.6	40.3	+ 2.3	42.3	32.9	+ 9.4
Dressmakers.....	122.0	126.9	- 5.1	.7	.3	+ .4
Milliners	30.4	26.5	+ 3.9	.5	.1	+ .4
Seamstresses.....	51.7	63.3	-11.6	1.6	1.6	No change
Tailoresses	24.4	27.9	- 3.5	54.1	50.7	+ 3.4
All occupations	1,883.2	1,736.9	+146.3	7,997.0	7,933.3	+ 66.7

In the first table for these occupations,²⁰ the percentage increase between 1890 and 1900 was greater for men than for women in the following "occupations": launderers and laundresses, servants and waitresses, cotton-mill operatives, dressmakers, milliners, seamstresses, tailors and tailoresses. Again it is interesting to note that, with the single exception of the employees in the cotton mills, these are all the traditionally "feminine" occupations. The table just given, however, shows that per ten thousand of each sex increase in number becoming laundresses and milliners²¹ is greater for women than for men.

The occupations which show a greater increase for men than for women in both tables are: servants and waitresses, cotton-mill operatives, dressmakers, seamstresses, tailors and tailoresses. Again, the census of course throws no light as to the cause of the greater increase for men in these occupations which, in the face of the greater increase in the number of women than in the number of men gainfully employed, is a fact of considerable social impor-

²⁰ See p. 28.

²¹ The use of the term "milliners" in the *Census of Occupations* is very curious. For example, milliners are classed under "textiles," and the statistics are further of little value for comparing the changes in the number of men and women employed, because there is no clue given as to whether a milliner is a person who owns or manages a shop, or a person who makes or trims hats.

tance. So far as these statistics for dressmakers, seamstresses, tailors and tailoresses are concerned, the census method of classification is so inadequate as to render them of very questionable value. No one knows what is meant by a dressmaker, a seamstress or tailoress. Are the skilled employees in a shirtwaist factory dressmakers? and is the home-finisher in the tenement a seamstress or a tailoress? The statistics given in the *Census of Manufactures* show that in 1900 there were 310,000 women employed in the various branches of the clothing industry in this country, and it is certainly a matter for regret that the *Census of Occupations* furnishes so little useful information regarding this important woman's industry. Moreover, the statistics given under this anomalous classification²² do not agree with the statistics in the *Census of Manufactures*. Comparing, for example, the figures given under "women's clothing, dress-making" in the latter with the number of dressmakers in the *Census of Occupations*, we find the following discrepancies:

	MEN *		WOMEN *		CHILDREN UNDER SIXTEEN *	
	1900	1890	1900	1890	1900	1890
Census of manufactures† — "dress-makers"†	4,379	1,056	40,835	47,164	381	393
Census of occupations — "dress-makers"§	2,090	836	344,794	292,668	...	...

* In the *Census of Occupations*, men and women included children over ten years.

† The *Census of Manufactures* also gives the following figures under "women's clothing-factory product":

	MEN		WOMEN		CHILDREN UNDER SIXTEEN	
	1900	1890	1900	1890	1900	1890
Women's clothing—factory product.....	26,109	12,963	56,866	25,913	764	273

But no combination between these figures and those given for dressmaking would make possible a result that could be reconciled with the figures from the *Census of Occupations*.

† *Twelfth Census of Manufactures*, Part III, p. 302.

§ *Twelfth Census of Occupations*, p. lii.

²² To see how hopeless would be any attempt to obtain information regarding the employment of women in the garment-making industry from the census sta-

The statistics in the *Census of Manufactures* regarding the employment of men, women, and children in the clothing industry are so interesting that it has seemed worth while to collect them in two tables given below. The first shows absolute number of each sex in main branches of the industry, and percentage changes.

OCCUPATIONS	MEN		WOMEN		CHILDREN		PER CENT. CHANGE		
	1900	1890	1900	1890	1900	1890	Men	Women	Child'n
Men's clothing:									
Factory product	48,077	67,786	69,862	75,621	3,011	1,519	- 2.9	- 7.6	+ 98.2
Custom work and re- pairing	48,748	50,854	19,533	19,779	868	546	- 4.1	- 1.2	+ 58.9
Shirts	6,604	5,437	31,074	25,563	814	207	+ 21.4	+ 21.5	+ 293.2
Furnishing goods*..	4,311	4,152	25,283	16,415	622	211	+ 3.8	+ 54.0	+ 194.7
Total	108,166	128,701	146,231	138,055	5,354	2,499	- 15.9	+ 5.9	+ 114.2
Women's clothing.									
Factory product	26,109	12,963	56,866	25,913	764	273	+ 101.4	+ 119.4	+ 179.7
Dressmaking	4,379	1,056	40,835	47,164	381	393	+ 314.6	- 13.4	- 3.1
Total	30,488	14,019	97,701	73,077	1,145	666	+ 117.4	+ 33.6	+ 71.9
Miscellaneous †	41,961	33,560	66,118	51,301	9,145	4,344	+ 25.0	+ 28.8	+ 110.5
Total	180,615	176,280	310,050	262,433	15,644	7,509	+ 2.4	+ 21.9	+ 108.3

* Men's clothing, factory product—button-holes is included in this total, but omitted from the list as relatively unimportant.

† "Miscellaneous" includes hats and caps, and hosiery and knit goods.

The rate of increase for the population over sixteen is 23.4 per cent. for men, 23.8 per cent. for women. The rate of increase for children between ten and sixteen is 15.5 per cent. From the table above, then, it is apparent that the clothing industry as a whole is a "declining" occupation for women, a more strikingly "declining" occupation for men, and an occupation in which the number

tistics, it is only necessary to call attention to the fact that in 1850 suspender-makers and window-shade makers were included under the classification "dress-makers, milliners and seamstresses;" in 1860, one occupational group comprised "mantua-makers, milliners, seamstresses, skirt-makers, suspender-makers, window-shade makers;" in 1870, fur-workers, milliners, dress- and mantua-makers, and window-shade makers were grouped together, while tailors, tailoresses, and seamstresses made another group; in 1880, one occupational group included fur-workers, milliners, dressmakers and seamstresses. (Eleventh Census, *Population*, Vol. II, p. xcvi.) Comment on the "essential viciousness" of such a classification is certainly unnecessary.

of children employed has increased more than 100 per cent. The census does not explain these changes. The number of women employed has decreased absolutely as well as relatively in the making of men's clothing, both factory product and custom work, as well as in dressmaking. The number of women employed in the making of men's furnishing goods has increased very noticeably, and the number of both women and men employed in the manufacture of women's ready-made clothing has more than doubled. The number of children has increased for all branches, except dressmaking. When the numbers of each sex employed per ten thousand of the population are given, the results are still very much the same, as the following table indicates:

OCCUPATIONS	MEN			WOMEN			CHILDREN		
	1900	1890	Change	1900	1890	Change	1900	1890	Change
Men's clothing:									
Factory product.....	19.3	33.6	-14.3	29.3	39.8	-10.5	3.1	1.8	+2.0
Custom work and re-									
pairing.....	19.6	25.2	- 5.6	8.3	10.4	- 2.1	0.9	0.6	+0.3
Men's shirts.....	2.6	2.7	- 0.1	13.2	13.4	- 0.2	0.8	0.2	+0.6
Furnishing goods...	1.7	2.0	- 0.3	10.6	8.6	+ 2.0	0.6	0.2	+0.4
Total	43.5	63.9	-20.4	62.2	72.8	-10.6	5.5	3.0	+2.5
Women's clothing:									
Factory product.....	10.5	6.4	+ 4.1	24.2	13.6	+10.6	0.7	0.3	+0.4
Dressmaking.....	1.7	0.5	+ 1.2	17.3	24.8	- 7.5	0.3	0.4	-0.1
Total.....	12.2	6.9	+ 5.3	41.6	38.5	+ 3.1	1.1	0.8	+0.3
Miscellaneous	16.8	16.6	+ 0.2	28.1	27.0	+ 1.1	9.0	5.2	+3.8
Total clothing.....	72.6	87.5	- 4.9	132.0	138.3	- 6.3	16.2	9.0	+7.2

From these two tables certain very definite conclusions with regard to the employment of men, women, and children in the clothing industry may be drawn: (1) the employment of men and women is decreasing; (2) the employment of children is increasing; (3) the employment of both men and women in the making of men's clothing is decreasing, though increasing in the manufacture of women's ready-made garments; (4) the number of women in dressmaking is decreasing and the number of men increasing. It is impossible to explain these changes.

It would prolong this study of the employment of women rather unprofitably if the occupations employing less than 1 per cent. of the total number of women gainfully employed were

considered in detail. Of these it seems worth while to note that no one that employs more than 15,000 women is "declining."

Briefly to recapitulate the facts regarding changes in the employment of women during the last decade: (1) the total number of women gainfully employed and the number of women employed in each of the five large occupational groups have increased a greater rate per cent. than the total population, the total male population, or the total female population; (2) among these five large occupational groups, those which represent the employment of middle-class women have increased at a proportionally greater rate than those which represent the employment of working-class women; (3) of the eighteen "occupations" employing more than 1 per cent. of the total number of women gainfully employed, the "declining" occupations for women are the traditionally feminine ones—dressmakers, servants and waitresses, seamstresses and tailoresses; and it should be added that only one of these is also a "declining" occupation for men; (4) in garment-making the employment of both women and men has fallen off, and the employment of children under sixteen has increased, for the industry as a whole; but while the number of men and women employed in making men's clothing has decreased, the number of both engaged in the manufacture of women's ready-made garments has increased. It has already been pointed out that the figures taken from the *Census of Manufactures* cannot be reconciled with those taken from the *Census of Occupations*. It is undeniable that there are some important social facts and tendencies with regard to the employment of women behind these obscurely general tables, but the necessary explanations can be found only after a thorough and competent investigation of the more important industries.

To what extent is there competition between men and women?—There are two kinds of competition to be discussed. The first, not true competition, but displacement, occurring when women, because of a lower standard of life, or a less workmanlike ideal, or a greater degree of mechanical facility, to be distinguished from mechanical technique, take over occupations once monopolized by men. The problem is similar to that of the transfer

of processes formerly human to the machine, and, while of immense interest from certain limited view-points, is not particularly important to an understanding of the ultimate possibilities for women in industrial life. It is obvious that, for processes requiring less skill and dignity, the untrained and casual laborer will be employed, whatever happens to be the sex. And if, because of lack of training or the prospect of a temporary stay in the industrial world, women are the casual laborers, these tasks will fall to them, unless taken from them by the still less skilled and dignified labor of children, in those communities in which there is no public regulation of the subject.²³ But there is another kind of competition possible—that existing when both perform the task in approximately the same way, so that both are of approximately the same value to the employer, and should be able to demand approximately the same reward. It is of fundamental importance to determine whether this form of competition is to be found at all; if so, where and to what extent?

From the *Census of Occupations* it might be readily inferred that in most vocations men and women are to be found doing the same task in presumably the same way. Attention has been called to the fact that out of 303 occupations there are only eight in which women are not engaged, and only one²⁴ in which men are not scheduled. But the inference that the great body of workers is composed of men and women working side by side at the various processes proves to be hastily drawn. Undoubtedly, in special isolated cases men and women employ themselves in identical ways; but sometimes, when this is true, there is often such a preponderance in the number of one or the other sex that that fact almost constitutes a certain disadvantage to those in the minority. It often happens, too, that when they are scheduled as engaged in the same occupation, further inquiry reveals the fact that they perform different tasks; or, if they perform the same

²³ E. g., "In the boot and shoe industry, between 1890-1900 there was a marked increase in the number of women and children, while the number of men showed an actual decrease of about 200, women are largely taking the places of men in this industry in the operation of the lighter kind of machinery, and children are to a considerable extent succeeding to the places made vacant by women."—Census, *Manufactures*, Part I, p. cxvii.

tasks, they do so in different establishments or in different localities, and so constitute to a degree non-competing groups.

On the question of how far they perform the same tasks, the *Census of Employees and Wages* furnishes some light. In that inquiry, thirty-four industries were investigated, so far as could be done by considering 720 selected establishments, in which there were 318 different occupations scheduled for the men, as against 82 for the women. In the following industries no women were employed: woodworking (comprising the making of agricultural implements, furniture, pianos, wagons and carriages), lumber- and planing-mills, distillers, flour-mills, brickyards, chemical manufactories, the slaughtering houses there investigated. In the iron- and steel-mills, the glass factories, and tanneries, women are scheduled, but their mode of employment is not described. Among the textile industries it appears that in carpet-mills there is no occupation peculiar to the business in which both men and women are engaged;²⁵ in the cotton-mills there are sixteen different processes mentioned, in only four of which are men and women to be found;²⁶ in the woolen mills there are fourteen specific occupations, in five of which both sexes are engaged. Other employments make the following showing:

Employments	Only Men	Only Women	Both Men and Women
Tobacco, etc.....	7	..	2
Potteries.....	3	1	3
Collars and cuffs.....	3	0	0
Candy-making.....	2	3	..
Cigars.....	1	1	3
Bakeries.....	5	..	..
Clothing.....	3	3	1
Dyeing and finishing.....	7	..	..
Foundries.....	25	..	2

In a number of cases men and women may be classified in "all other occupations," or "all other occupations peculiar to this industry." These have not been counted here. And it is to be noted that the record in the column "Both Men and Women" does not necessarily mean that men and women were working

²⁴ Midwives; undoubtedly among the men nurses and physicians there are those who serve as accoucheurs.

²⁵ P. 7. The same thing is true of the shoe factories (p. 532). ²⁶ P. 16.

side by side in direct competition. Women are frequently employed in a process in one factory at which only men are employed in another. A census of this industry would show both men and women engaged in this process or occupation, while, as a matter of fact, they may nowhere be working together. The absence of competition in this sense is recognized by the census when it is alleged that "if we look at the list of occupations, we find women doing the lighter work, the mechanical work, the less skilled;" as, for example,²⁷ men are "candy-makers;" women "dip," "pack," "wrap;" or, in the making of clothing, men only are bushelers, cutters, and foremen,²⁸ while women are seamers, basters, and sewing-machine operatives.

Attention has been frequently called to the same phenomenon;²⁹ and additional testimony can be had from the so-called Aldrich Report,³⁰ in which out of 543 wage series only 83 contained women's schedules, and 22 both men's and women's.

In an attempt made in 1895 by the Bureau of Labor to compare the work and wages of men, women, and children, it was found that in only 436 out of 1,067 establishments investigated were the agents of the department—

able to secure data as to the relative efficiency of women and children and of men working at the same occupations. . . . In many cases, however, in which the same occupation admits of two grades of work, there is no doubt that women and children perform the lighter, while men perform the heavier grades.³¹

And further testimony, were more needed, to the same effect could be adduced from an admirable study of conditions of work prevailing among English women in the printing trades.³²

From all this evidence it again becomes obvious that the census of so-called "occupations" is not a census of occupations at

²⁷ *Employes and Wages*, pp. lxxviii, lxxiii.

²⁸ *Ibid.*, p. lxxvii.

²⁹ Webb, "Alleged Differences between the Wages Paid to Men and to Women," *Economic Journal*, Vol. I, p. 645; also Beatrice Webb, *The Case for the Factory Acts*; Collet, "Women's Work in Leeds," *Economic Journal*, Vol. I, p. 460.

³⁰ *Senate Report No. 1394*, on "Wholesale Prices, Wages and Transportation."

³¹ *Eleventh Annual Report of the Commissioner of Labor*, p. 26.

³² *Women in the Printing Trades: A Sociological Study*, edited by J. Ramsay MacDonald.

all, but of occupational groups, furnishing an indefinite amount of most uncertain information as to the nature of the employment in general of those who compose the industrial forces of the country. From it we can learn *how many, who, in connection with what general industries*, but NOT *what*.

The subject of women's real competition with men in this latter sense is one of fundamental importance. With it is inextricably interwoven the vital question of woman's wages,³³ and the more vital question of the nature of the work to be done by women, the dignity and permanence of their position in the industrial world, and the effect upon them of the work they do.

The present system seems to present a form of division of labor which is unendurable. It is quite possible to imagine a rational system of division of labor between the sexes which would allot to women tasks peculiarly fitted to them and reward their performance in adequate wages. But since difference between the sexes is physiological, such a division would assign to women the exercise of physiological functions, which we are not yet ready to recognize as the basis for pecuniary returns.

But, in the absence of such a rational basis for division of labor, the only plan compatible with the continued self-respect of working-women is evidently free competition between men and women in those processes in which both can engage,³⁴ which means that women must enter upon industrial life in a workman-like spirit, have opportunity to acquire necessary skill, and overcome the obstacles to practice of a craft after it has been acquired.

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³³ Here attention might be called to the demand for "the same wage for the same work." Such a demand can be based only on the claim that there is the "same work." In the face of facts just presented, it is fair to ask: Where is the same work to be found under present conditions?

³⁴ For interesting discussion of the question whether women can compete with men, see Richardson, *Woman's Work in Creation* (Longmans, 1886).